

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1
P694

United States Department of Agriculture,
BUREAU OF PLANT INDUSTRY,
Forage-Crop Investigations,
WASHINGTON, D. C.

THE FLORIDA VELVET BEAN (*Stizolobium deeringianum*).

The Florida velvet bean is a rampant-growing, leguminous annual, often making vines 50 to 75 feet in length. It grows well on soils too light and sandy for most other legumes and produces an immense yield of forage which is excellent feed for cattle and hogs. It also makes a very good hay if cut soon after the first flowers appear, but the vines are so long and tangled that it is difficult to harvest. It is one of the best crops for newly cleared lands, as its growth is so rapid and dense that it smothers out the grass and brings the soil into a cultivable condition better than any other crop. It also has great value for green manuring and as a restorative for soils needing nitrogen and humus. Like other legumes it draws its nitrogen from the air, the proportion of nitrogen contained in the plants being about the same as in cowpeas, and as the total yield is much greater the total amount of nitrogen and humus added to the soil is correspondingly larger. A crop of 3 tons will add as much nitrogen to the soil as will a ton of cottonseed meal, while the amount of humus will be three times as great.

The planting should not be done too early, but at about the same time as cotton, as the beans do not make a thrifty growth until the soil has become well warmed. One bushel of seed will plant 4 to 6 acres. The vines should be given some sort of support to keep them up from the ground; otherwise they will not fruit heavily or make the most vigorous growth. Poles may be used for the purpose, but are troublesome and expensive. Cornstalks are more commonly used. Some strong-growing variety, like the Mexican June, will give all the needed support. The corn should be planted early and when about 2 feet high the beans are planted between the hills. After planting, the crop should be cultivated until the vines shade the ground. The vines make such a heavy growth that little corn can be gathered from the field, but when it is grazed little of it will be lost. The only expense for growing the corn is the planting and that will be more than repaid in the increased yield of the beans.

The principal value of velvet beans is for winter grazing and for that purpose it is one of the best crops which can be grown on the light soils and in the long season of the immediate Gulf coast. It is usual to allow the crop to grow until December or until killed by frost, after which it is grazed through the winter, as the vines and leaves decay so slowly that they retain their palatability a long time. The matured beans are quite hard when dry, but are eaten well in the fall or whenever they become slightly softened either by rains or by lying on damp soil. The yield of seed from a fair growth of vines is usually from 20 to 30 bushels per acre and much heavier yields are often secured. One hundred pounds of the pods will shell about 60 pounds, or 1 bushel of seed. They do not need to be shelled for feeding cattle and make an excellent grain feed for winter use. Experiments made at the Agricultural Experiment Station of Florida indicate that for feeding 3 pounds of the beans in the pods are worth more than 1 pound of cottonseed meal.

There are several other varieties of velvet bean which are more or less common in cultivation, among them being the Lyon and the Yokohama. The Florida bean has a closely fitting, nearly cylindrical pod about 3 inches in length, and the beans are nearly spherical, varying in color from a dark, mottled brown to white. The Lyon bean, which matures at about the same time as the Florida, has a flattened pod 4 to 6 inches in length and with flattened, nearly white seeds. The Yokohama variety makes much less vine than either of the others, but fully as many seeds, and matures about 2 months earlier, the pods being 5 to 6 inches in length, flattened, with large, flattened seeds which are light gray in color.

S. M. TRACY.

FEBRUARY 7, 1912.

